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ABSTRACT

This coding manual was developed for the Texas Teacher Effectiveness Study and is intended to be self-contained. The coding system provides for extensive coding of student initiated questions and comments, opinion questions, and expanded private work contracts, both teacher initiated and student initiated, including extensive coding of quality and type of behavioral contacts. The focus for this system was on teacher behavior, since the larger research question involved the relative effectiveness of teacher process behaviors in producing student learning gains. However, the system can be readily adapted to account for individual student interaction with teachers by including a space for coding a student number. (Author/MV)

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TEXAS TEACHER EFFECTIVENESS STUDY:

Classroom Coding Manual

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and

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Report No. 76-2

Research and Development Center for Teacher Education

The University of Texas at Austin

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Forward

The following coding manual was developed for the Texas Teacher Effectiveness Study and is intended to be self-contained. This system is similar in inception to the "Teacher-Child Dyadic Interaction System" reprinted in Mirrors for Behavior: An anthology of observation instruments continued, 1970 supplement, Volume A. Philadelphia: Research for Better Schools, Inc., 1970. Those interested in this earlier version may wish to examine it too. The following coding system differs in several ways from the earlier one in that it includes provision for extensive coding of student initiated questions and comments; opinion questions; and expanded private work contacts both teacher initiated and student initiated with more extensive coding of quality and type of behavioral contacts.

The focus for this system was on teacher behavior since the larger research question involved the relative effectiveness of teacher process behaviors in producing student learning gains. However, this system can be readily adapted to account for individual student interaction with teachers by including a space for coding student number.

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GENERAL PROCEDURE AND ORGANIZATION OF CODING

1. Fill in all the information at the top of each and every sheet.

2. Use a separate sheet for Response Opportunities for each subject. Do not draw lines - use (and label) a separate sheet.

3. Use a separate sheet for Response Opportunities and a separate sheet for Child Created Contacts (CCC) and Teacher Afforded Contacts (TAC) for reading groups. Label the sheet "Reading Group." On the CCC an TAC sheet draw a line across the entire page near the bottom to separate inside-group contacts from outside-group contacts. Outside-group contacts go below the line at the bottom of the page.

4. Transitions are to go on the same sheet as the preceding activity, but separated from the activity by a line across the entire page. Transitions must be labeled transition and one of these categories of transition designated: (1) entire class, (2) interchange between classes, (3) intraclass group changes (i.e. reading group or math group).

5. Keep an accurate record of the time. Record time at the beginning of each new activity.

6. When you fill up one section on a sheet, although the other sections may be blank, begin a new sheet for all sections.

The essential thing to remember when coding is that you must divide and label your coding so that it will be meaningful and useful later. We must be able later to match your coding by time and activity with that of your partner in order to get the most accurate picture of what went on in the classroom and in order to establish inter-coder reliability.

ACADEMIC
RESPONSE OPPORTUNITIES

The coding of response opportunities is perhaps the most difficult coding in the system, since several aspects of the interaction have to be coded and the sequence of events within the interaction must be maintained and indicated in the coding. To some extent the sequential aspects have already been designed into the coding sheet, since in going from left to right the coder takes up coding decisions in the order in which they tend to occur naturally: first, he places a "1" for a male and a "2" for a female in the column indicating the kind of question the child is responding to; then he codes the level of question; then he codes the quality of the child's answer; then he codes the teacher's feedback to the child's answer. Each of these aspects of coding response opportunities is described in turn below, after clarification concerning the term "response opportunity."

Three key aspects characterize "response opportunities" as they are defined in this system: (a) they are public interactions between the teacher and only a single child at a time, but nevertheless meant for and monitored by the entire class or by the entire group operating at the moment (such as the reading group); (b) they occur when the teacher asks a question demanding a verbal response from the child or when she asks the child to publicly respond to a question requiring a non-verbal response (such as indicating something on the board, pointing to the right letter or word, etc.); (c) only a single individual child makes the response (chorus or unison responses in which two or more children call out the answer simultaneously are not considered "response opportunities"). Thus a response opportunity involves a public attempt by an individual child to deal with a question posed by the teacher.

Other types of teacher-child interaction are not coded as "response opportunities" because they differ from the preceding definition in one or more ways. It is important for coding validity to bear in mind that "response opportunities" as used in this system are considered to be teacher afforded; it is assumed that the teacher explicitly or

at least implicitly wants the child involved in the interaction to answer the question. Response opportunities are deliberate teacher attempts to get a child to respond, or at least implicit teacher encouragement in situations where the child seeks out a response opportunity (see "call out" below). Response opportunities thus involve individual recognition of the child by the teacher. The previously mentioned situation in which two or more children call out an answer simultaneously is not considered a "response opportunity" because no individual child receives individual recognition or feedback. Even if only a single child calls out the answer, a response opportunity is coded only if the teacher responds to him in some way. Should the teacher ignore his answer altogether, it is not considered a response opportunity.

The public nature of the "response opportunity" distinguishes it from the various forms of teacher-afforded and child-created dyadic contacts (procedural, work-related, and behavioral). In the teacher-afforded and child-created work-related contacts, the teacher talks to the child about his own individual seat work. Teacher feedback here is "private," meant only for the child involved and not for the class as a whole. These contacts occur when individual children bring their work to the teacher to ask him about it or when the teacher goes around the room correcting work individually at each desk. It frequently happens that the teacher will question a child when dealing with him individually about his seat work. Such an event is coded under work-related dyadic contacts and is not considered a "response opportunity," since the question is meant only for the particular child involved and is not a public question.

Response opportunities must also be distinguished from reading and recitation turns, which are not coded in this system. The major distinction is that response opportunities are initiated by a teacher

question which requires a focal, circumscribed answer. Reading and recitation turns are more extended performances by the child, in which he responds at length to an initial question or command. Ordinarily these will involve verbal demonstration of mastery (overlearning) of skill, as when reading aloud in reading groups or reciting mathematics tables. Response opportunities involve focal questions which, along with the answer given by the child and the ensuing feedback, form a natural unit. Each such question-answer-feedback segment constitutes a self-contained interaction sequence in its own right, easily separable from preceding or following units, even when they involve the same child. Whenever the response demand on the child is such that he will continue responding until and unless he makes a mistake, the interaction is a reading or recitation turn and not a response opportunity and therefore should not be coded.

Each response opportunity which is coded requires the checking of four separate bits of information: the <u>type</u> of response opportunity, the level of question asked, the quality of the child's answer, and the nature of the teacher's feedback response. The last item to be coded (teacher's feedback) sometimes will be complex enough to include two or more of the categories of teacher feedback, so that some response opportunities will require five or more separate markings.

Four <u>types</u> of response opportunity have been identified: In the first type, the teacher names the child first and then asks her question. This column on the coding sheet is labelled (PRE); in the second type the teacher asks her question first, but she calls on a child who does not have his hand raised or a <u>non-volunteer</u> (NVOL). The third type of response opportunity involves the teacher's asking a question publicly but calling on a child who does have his hand raised (<u>volunteer</u> or VOL). The fourth type of situation is

the call out (CALL).

Response opportunities created by children who call out answers to teachers' questions without waiting for permission to respond are coded in the call out column. The teacher creates the response opportunity by asking a public question, but one child calls out an answer to this question before he has a chance to indicate that a particular child should respond. This type of response opportunity is therefore child-created, in that it was not the teacher's intent that the child answer the question. Besides those already mentioned, one additional consideration must be present before coders code a response opportunity under call out. the teacher must recognize the child's response and make some response to the child in reaction to it. Called out answers which are ignored by the teacher are not considered response opportunities and are not coded. A response opportunity coded as call out then, requires the following: (a) the teacher asks a public question; (b) the child calls out an answer to the question before the teacher has a chance to call on anyone to respond: (c) the teacher then turns his attention to the child who called out the answer and says something in response to him The teacher's response to the child must contain feedback regarding his answer to the question; the interaction is not coded as a response opportunity under call out if the teacher confines her remarks to criticism of the child for calling out the answer. It is necessary, therefore, that the teacher make some feedback response to the child who calls out the answer.

Just as there may be confusion in distinguishing between questions directed to a non volunteer and questions directed to a volunteer when the coder is unsure whether or not the child has raised his hand, there may also be confusion in distinguishing call outs if the coder is unsure whether or not the teacher made some indication to the child that he should answer the question. There is usually little problem when the teacher calls on the children by name, but some teachers will call on children by pointing at them or otherwise non-verbally indicating that they should make a response. Coders should be particularly

alert with such teachers to pick up these less obvious cues given to children to signal their permission to respond. When the coder is not sure whether or not the teacher made such a signal, and therefore is not sure whether or not to code a question to a volunteer (VOL) or a call out (CALL), the interaction should be coded as a call out.

Similarly, when the coder is not sure whether the child selected had his hand up, VOL should be coded.

LEVEL OF QUESTION

After noting the type of response opportunity and the identity of the child involved by entering the child's number in the appropriate column, the coder now codes the level of question asked by the teacher. Level of question refers to the nature of the response demand made upon the child. Three levels are identified: process questions, product questions, and choice questions.

These three levels refer only to questions about academic or school-related content.

To determine the level of the response demand built into teacher's questions the coder must make two decisions: (a) he must decide whether the question is an academic question or a self-reference question: (b) if it is an academic question he must determine whether it is a process question, product question, or choice question. Academic questions concern factual matters connected with curriculum content of the school. They require the child to make a response showing that he has certain knowledge of information, to provide such information himself in answering the question, or to explain something at length showing his grasp of the principles involved. The content of the question deals with reading, writing, arithmetic, social studies, science, spelling, or other aspects of curriculum which the school is attempting to deliberately teach the child. Questions dealing with these matters are considered academic questions and subdivided into process, product, and choice questions. Questions that do not deal with such factual matters but instead ask for the child's preferences, personal experiences, and so forth are tallied in the boxes under Self-Reference questions. Questions which deal with a child's opinions or predictions are coded separately as Opinion Questions. Both the Self-Reference and Opinion categories will be described later.

Process Questions

This is the most complex level of question, in which the child is required to explain something in a way that requires him to integrate facts or to show knowledge of their interrelationships. It most frequently is a "why?" or "how?" question, and usually requires an extended phrase or sentence for formulating an adequate response -- single word answers are not usually sufficient. A process question requires the child to specify the cognitive and/or behavioral steps that must be gone through in order to solve a problem or come up with an answer.

Examples: What can we learn from this story?
What does that saying mean?
Why should we not play with matches?
How do new plants grow from old ones?
Why does it get dark at night?
How do you know that that's a long "e" sound?
Why is that a wrong answer?
What should you do if . . . ?

As always, the teacher's intent determines the coding. For example, the teacher may ask "When you ride your bike and come to a stop sign, what do you do?" Ordinarily this would be coded as a product question demanding the answer "Stop." However, if the question appears just after a lesson in which the teacher had explained the process of stopping (stop the bike, carefully look right and left, judge the distance of any cars in sight, and quickly get to the other side, etc.), this question would be coded as a process question. This example illustrates the procedure to be followed when in doubt in determining whether a question should be process versus product. If the teacher seems to be requiring a process answer, that is a long explanation of a complex sequence of events, process question should be coded. If on the other hand he seems to be satisfied with a simple short answer, product question would be coded.

Product Questions

Product questions seek a specific correct answer which can be expressed in a single word or short phrase. They do not involve the explanations built into process questions, and at the same time they do not provide the child with alternatives which include the correct answer, as in choice questions. Thus the child must either know the answer and verbalize it or take a guess by encoding an answer on his own.

Examples: What (letter, number, day, shape, color, etc.) is this?
Who (discovered America, is the president)?
What is this?
When (is Christmas, was America discovered, etc)?
Where (is Boston, do we buy food, etc.)?
What do we get from cows?
How many _____ are there?
How do you spell _____?
What do buses do?
What is this word? (a question requiring the child to read a single word is coded as a product question rather than as a reading turn, which involves reading at length)

Product questions usually begin with "who?", "what?", "when?", "where?", "how much?", or "how many?". Many of the response opportunities in the early school grades will be coded as product questions if the child is asked to identify a letter, produce a sum or remainder, etc. While the child may have to go through many cognitive processes in order to arrive at the answer, the question itself as asked does not require him to verbalize these processes but only to produce the answer. So long as this is true the question is a product question, and the response demand on the child is less than it is for a process question, since less is required of the child and since the possibility remains that he might guess the answer without knowing the process that the teacher wants him to know.

The following example occurred during a reading group: The teacher gave each child a card with a word on it and then told the children, each in turn, to read their word and then place it under the picture that it matched This was coded as two separate response opportunities for each child; the first one being a product question (read the word), and the second being a choice question (match the word to one of the pictures).

In discussing stories or pictures there sometimes will be difficulty in distinguishing product questions from self-reference questions. As always, coding must follow the teacher's apparent intent. Thus if the answer to the question is to be found by examining the picture (What color is Selly's wagon?), the question is coded as a product question. On the other hand, if the teacher is not asking for a factual answer but wants to get opinions on what the children think might happen (What's Dick going to do now?), an opinion question is coded. In general, if the teacher is fishing for the right answer he is asking a product question; if he is instead only trying to get the children to express Themselves or to talk about the picture, self-reference or opinion are coded. Sometimes the teacher will begin with a product question and, seeing that he isn't going to get the answer, will continue to ask various children what they think will happen, etc., so that the remainder of the questions will be coded as self-reference or opinion questions.

Choice Questions

In the choice question the child does not have to produce a substantive response but may instead simply choose one of two or more implied or expressed alternatives. Included are yes-no questions, either-or questions, and questions which present more than two alternatives but which make it clear that the correct answer is one of the alternatives presented. Choice questions are of interest because they tend to encourage guessing by maximizing the child's chances of producing correct answers (response products), even though he may lack the correct knowledge or skill (response process) that the teacher assumes to be operating when children answer correctly. Choice questions involve a more limited response demand upon the child than do product questions, since unlike the latter they do not require the child to produce a substantive response on his own; the child knows that the correct answer is one of the alternatives the teacher presents in asking the question, and if he is disposed to guess he can make a response by indicating one of those alternatives. Occasionally a large number of alternatives will be present, as when the teacher asks the child to indicate or underline one particular letter of the alphabet (out of the 26). This nevertheless is still coded as a choice question because the child knows that the correct answer is one of the alternatives presented. When the alternatives are presented verbally, there are usually only two or three alternative categories of response.

Two criteria distinguish choice questions: (a) the question deals with academic content and cannot be classed as a self-reference question; (b) the teacher provides response alternatives, either verbally or by showing the child visual aids to look at in connection with the question, which include the correct answer among them (ie., the correct answer is one of the alternatives presented). Examples:

Is this (b or d, 3 or 4, Monday or Tuesday, a square or a circle, red or blue)? (either-or questions)

Which of these is (taller, smaller, blue, a vowel, the same as this one, etc.)? (select the right answer from among the alternatives presented)

Are these (the same, blue, circles, synonyms, correct, etc.)? (Yes-no questions)

Which four of these five things go together? (the child must pick four pictures but nevertheless the correct answers are provided in the alternatives shown)

The big bear sat on a brown box. Which words start with the same letter? (although more difficult, this is still a choice question in that the alternatives are provided in the question itself)

Look at the color words on the black board. Which ones start with the letter "b"? (Again, the correct answers are included in the alternatives presented. If instead the children were expected to pull these from memory (What color words start with the letter "b"?) without any reference to concrete examples of color words, the question would be coded as a product question.)

Make an X on all the animals that have a tail. (Any workbook or worksheet exercise which involves marking one or more of a set of alternatives according to some rule is treated as a choice question, since all the alternatives are provided.)

Coders should bear in mind that any question which is an either-or question or a yes-no question is coded as a choice question, regardless of the complexity of the content. Examples:

If I pour the water from this white dish into this test tube, will there be more water, less water, or just the same amount?

Are the lines of a rectangle equal and parallel, equal but not parallel, or parallel but not equal?

Which is better to put out a grease fire -- water or sand?

Although the preceding examples are apparently complex, it nevertheless remains possible for some children who do not understand the processes involved to be able to respond to the question, since the response alternatives are provided in the question itself. Thus should the child decide to respond rather than say that he doesn't know or ask for more information, he can respond by verbalizing one of the response alternatives back to the teacher.

Sometimes a question which would ordinarily be classified as a product question is coded as a choice question because of the immediately preceding events. The previous example "What color words start with 'b'?", for instance would be classified as a choice question if the teacher had preceded it by calling the children's attention to concrete examples of color words (by writing them on the board, showing visual aid materials on which the color words were printed). Another example occurred in the science lesson in which the teacher gave an extended presentation about how leaves could be classified according to size, shape, and color. She repeatedly compared pairs of leaves explaining that she was looking for similarities and differences in size, shape, and color. The repetitive nature of her presentation and the restriction of her language to the key words "size," "shape," and "color" led eventually to the isolation of these three words as a restricted set of alternatives to respond to the question "How are these two leaves different?" When she later began asking the children to compare leaves her questions were coded as choice questions, since she had identified and reinforced "size," "shape," and "color" as the response

alternatives she had in mind and because she accepted with apparent satisfaction the responses of children who simply verbalized one of these key words without any additional material.

CHILD'S ANSWER

After coding the child's identity, the type of question, and the level of question, the coder notes the child's answer into one of four categories: correct, partially correct, incorrect, or no response. The teacher's intent is taken into account in determining the correctness of the child's response. Frequently teachers may ask ambiguous questions which are answered correctly or partially correctly from one point of view but which are treated as incorrect by the teacher, who was looking for a very specific answer. Thus it is the teacher's perception of the correctness of the child's response which is coded, not the coder's perception. This distinction is important because the next variable coded is the teacher's feedback to the child's response, and this feedback is considered to be feedback to the child's answer as perceived by the teacher. Consequently if the teacher reacts to a response as if it is wrong it is coded as wrong, even though another observer might consider it to be partially or even completely correct.

Correct Answers

If the child answers the teacher's question in a way that satisfies him, the answer is coded as correct. Determination of whether or not the teacher is satisfied with the child's answer does not necessarily require that the teacher positively affirm the answer or make some favorable response to it. Instead, the child's answer should be considered correct unless the teacher makes some positive action suggesting dissatisfaction with it (explicitly explaining that the child's answer is incorrect or only partially correct, giving the "correct" answer, or asking someone else to answer the same question). If the teacher does not make an attempt to improve upon or replace the child's answer with another, his answer is considered correct. This means that some answers that the coder would not accept but which the teacher treats as correct are to be coded as correct answers.

Part-Correct Answers

Part-correct answers are answers which are correct but incomplete as far as they go or answers which are correct from one point of view

but not the answer that the teacher is looking for. Again, the teacher's feedback response may determine the way the answer is coded. If the teacher indicates that the child's response is correct but incomplete, or if he indicates that the response is correct or defensible but not the answer that he is looking for, code the response as part-correct.

1. An answer is coded as part correct whenever the teacher indicates ambivalence about the response. This means that the teacher may accept the response as correct as far as it goes, but note that it is incomplete (as when the child gives only one part of a two part answer); another type occurs when the child's answer is more specific or more general than the particular one that the teacher had in mind, so that the teacher must indicate both the validity and the imprecision of the child's answer ("Well, it is an animal, but what kind of an animal is it exactly?"). Part correct answers will be coded most frequently when the child produces an answer that the teacher had not anticipated. Often this will be because the teacher's question was more ambiguous than the teacher realized when asking it.

2. Sometimes the child will make an answer that is correct in content but is not presented in a form which satisfies the teacher. Examples include shaking the head to indicate "yes" or "no" rather than responding verbally, answering the question in a word or a phrase when the teacher wants it put into a complete sentence, counting on the fingers when the teacher wants the child to do the problem in his mind, etc. These answers are also coded as part correct, since the teacher accepts the correctness of the content but criticizes the form.

Incorrect Answers

Responses coded as incorrect answers are those in which the child's response is treated as simply wrong by the teacher. The teacher need not explicitly tell the child that he is wrong; he may indicate this indirectly by searching for the answer from someone else or by providing it himself. In one of these ways the teacher indicates that the child's answer is not an acceptable response to the question he has asked.

Don't Know

Mumbling which does not appear to be an attempt to answer the question, as when the child seems to be talking to himself or perhaps membling "I don't know," would be coded as don't know, (DK).

This category is included in the coding system specifically for those instances when the child clearly does not answer the question which the teacher puts to him, and, in effect, says so, or makes some verbal response indicating this.

No response is coded whenever the child remains silent. If the child does make an intelligible response to the question it must be coded as correct part correct, or incorrect. Thus if a child mumbles an answer to a teacher's question and is asked by the teacher to repeat his answer more loudly, the answer will be coded as either part correct or incorrect, depending on the reason the teacher asked the child to repeat the question. If the teacher wants the child to repeat because she has heard his response but wants the other children to hear it or wants to avoid allowing children to mumble responses, the child's answer is coded as part correct, in that it is acceptable content delivered in unacceptable form. On the other hand, if the teacher is asking the child to repeat because the teacher has been unable to hear the child's answer and does not know whether it is correct or incorrect, the child's answer is coded as incorrect. Any mumbled answer which apparently is an attempt to answer the question is treated an incorrect as long as it remains unintelligible.

To summarize: if the child attempts to answer the teacher's question, his answer is coded as correct, part correct, or incorrect, depending on the teacher's reaction to it; if he indicates that he is unable to answer, it is coded as don't know (DK) or if he does not attempt to answer the question, it is coded as no response (NR).

SYMBOL	FEEDBACK REACTION
++	Praise (positive evaluation)
--	Criticism (negative evaluation)
0	No feedback response -- teacher does not react to child's answer
Pcss	Process feedback
Giv Ans	Gives correct answer (without getting into process)
Ask Oth	Asks another child to give the answer
Call	Call Out (some other child calls out the answer before the first child responds to the question)
Rept	The teacher repeats the question
Reph or Clue	Teacher rephrases the question or gives a clue
New Q	Teacher asks a new question

The first seven of the ten categories listed above are designated as "terminal" feedback, while the last three are called "sustaining" feedback. This is one of the key distinctions involved in studying communication of teacher expectations. The categories of sustaining feedback include teacher behavior which prolongs the response opportunity by providing a second chance to deal with the same or related questions. Use of sustaining feedback reactions is an index of the teacher's willingness to stick with the child until he can produce an acceptable answer. Terminal feedback, on the other hand, brings the response opportunity to a close. With terminal feedback reactions the teacher either gives the child the answer or sees that he gets it from someone else, or merely makes a feedback or evaluation response without supplying the answer. In either case, he does not sustain the interaction and provide additional response opportunities.

The terminal feedback categories may also be profitably subdivided for some purposes to the first three categories, which do not involve a substantive response or answer, and the second four categories, which do involve such an answer. The ten categories, then, may be summarized as follows: the first three categories of terminal

feedback provide the child only with positive or negative evaluation, or no feedback, and not with substantive information; the last four categories of terminal feedback do provide substantive information to the child, either from the teacher or from one of the other children; the final three categories (sustaining feedback) provide the child with a second response opportunity, either to answer the same question or to answer a related one. The categories are defined so as to be mutually exclusive but not contradictory, so that more than one category may apply to a given teacher feedback reaction. In such cases, each new category of teacher feedback is simply noted in the order in which it occurs. Certain types of multiple-category teacher feedback reactions require special coding conventions, but discussion of these will be deferred until the categories themselves are presented in more detail.

Praise

Praise refers to the teacher's evaluative reactions which go beyond the level of simple affirmation or positive feedback by verbally complimenting the child ("Good," "Fine," "Wonderful," etc.) and/or by accompanying verbalization of positive feedback with expressions or gestures connoting excitement or warmth. Thus praise is coded when the teacher does something more than merely indicate that the child has given a correct response. He communicates a positive evaluation or a warm personal reaction to the child and not merely an impersonal communication of information.

Criticism

Criticism parallels praise in that it refers to negative teacher evaluative reactions that go beyond the level of simple negation by expressing anger or personal criticism of the child in addition to indicating the incorrectness of his response. The category includes obvious verbal criticism ("That's a stupid answer," "What's the matter with you?" "If you'd pay attention, maybe you'd get it right") and verbal negation which is accompanied by expressive or gestural communication of hostility, anger, disgust, or sheer frustration. In general, any verbal response which disparagingly refers to the child's intellectual ability or, more frequently, his motivation to do good work, is coded as criticism. Statements of latter type by the teacher may

be factually true (i.e., the child may not have been paying attention) or may be unverifiable gratuitous rejection ("You just don't care"). Both are nevertheless coded as criticism, since this coding refers to the teacher's behavior per se and not to the veracity or justification for his statements.

No Feedback Reaction

If the teacher makes no response whatever following the child's answer to the question, he is coded for no feedback reaction. This means that he makes no verbal response to the child and does not communicate affirmation or negation by shaking his head in response to the answer. Instead, he merely moves on to something else, perhaps by starting to make a new point or by asking another child a question. Most coders will be surprised to find that this category is used much more often than they had expected. It frequently happens that the teacher makes no feedback reaction at all to the child's answer, especially in fast-moving question drills where he is pushing to get correct answers in an impersonal fashion, without paying attention to the individual child giving the answer.

In addition to the obvious condition of no feedback reaction outlined above, where the teacher says and does nothing in reaction to the child, one special type of teacher reaction is also coded in this category. This occurs when the teacher repeats the child's answer in a quizzical manner without indicating whether he considers it to be correct or incorrect. This reaction may frequently occur when the teacher is asking the children to guess, give opinions, or make predictions about something. In such instances he may reply to the child's answer ("He's going to go home and tell his mother") with an ambiguous response ("You think he'll go home and tell his mother?"). Unless the teacher's feedback reaction is further elaborated to provide affirmation or negation or some substantive answer to the child, it is coded as no feedback reaction.

Process Feedback

The process versus product distinction introduced previously in discussing level of question is also used in coding the level of teacher feedback. Process feedback is coded in the present category,

while the following three categories refer to product feedback (simply giving the answer). Process feedback is coded when the teacher goes beyond merely providing the right answer and discusses the cognitive or behavioral processes that are to be gone through in arriving at the answer. In other words, he reviews the question or problem with the child at length, telling him how to go about responding to it and not merely what the correct answer is. Process feedback occurs most frequently following errors, when the teacher explains the reasoning processes to be gone through to arrive at the correct answer or explains the erroneous processes followed by the child to arrive at the wrong answer. Process feedback may sometimes follow correct answers, as when the teacher elaborates on the response to verbalize the process knowledge it represents ("Yes, we know that we should use a capital letter since it is a proper name, and all proper names begin with capital letters"). Teachers may provide process feedback by simply answering a process question, since by definition a process question requires a process answer. Other than this special situation, however, process feedback will usually require elaboration upon the answer to a question.

Gives Answer

This category is used when the teacher gives the child the answer to the question, but does not elaborate sufficiently to be coded for process feedback. The category is used only when the child has given a wrong answer or has not answered the question. When the teacher gives an answer to a process question it is coded as process feedback. Otherwise, any situation in which the teacher provides the answer to the question to which he has asked is coded as gives answer. Usually this will correspond to product feedback following product questions, although occasionally giving the answer to choice questions may also be coded here if the child does not take a guess and try to answer the question himself.

Asks Other

If the teacher does not answer the question himself but instead asks some other child to answer it, the feedback is coded as asks other. This category is coded regardless of the level of question or feedback involved (i.e., feedback to process questions is still coded under asks other if the teacher asks another child to provide the answer). Sometimes the teacher will ask another child very explicitly to answer the question that could not be handled by the first ("Johnny, can you help Mary?"). However, this need not be so explicitly stated for asks other to be coded. Whenever the child does not answer a teacher question and the teacher moves to another child in order to get the answer to that same question, the teacher's feedback reaction is coded for asks other.

Call Out

The call out category is used when another child calls out the answer to the question before the teacher has a chance to act on his own. This category is coded regardless of the level of question asked: if another child calls out the answer to the teacher's question before either the first child or the teacher himself can provide that answer, the feedback category call out is coded. Usually this will mean also coding a response opportunity for the child who called out the answer, provided that the teacher makes some individual response after he calls out the answer. In any case, the feedback coded for the first child is call out.

Repeats Question

This category and the two to follow comprise the categories of sustaining feedback, in which the teacher sustains the response opportunity and provides the child with a second chance to respond. The first such reaction is when the teacher simply repeats the question. This will almost always occur when the child has made no response, although it may also occur at times in which he has given an incorrect response. In any case, if the teacher asks a question, waits some time without getting the correct answer, and then repeats the question

to the same child, his feedback reaction is coded as repeats question. The teacher need not repeat the entire question word for word in order to be coded in this category. Truncated versions of the original question and short probes to determine if the child can make any response to the original question, are both coded as repeats question. For example, to the original question "What color is this?" the following responses are all coded as repeats question: "What color?" "Well?" "Do you know?" "John?" (The latter said in a manner that communicates that the teacher is waiting for the child to respond to his original question).

In each of the variants mentioned above, the teacher is communicating that he is waiting for the child to respond to the original question and that he still wants him to respond if he can. The teacher does not change the question, as in the following categories, but merely repeats it or refers to it as it was asked previously.

Rephrase or Clue

In this feedback reaction, the teacher sustains the response opportunity by rephrasing the question or giving the child a clue as to how to respond to it. Usually the rephrasing of the question in this situation will be such as to simplify it, particularly in moving from a product question ("What color is this?") to a choice question ("Is it red or blue?"). Rather than rephrase the question in this manner, the teacher may provide a clue expressed as a declarative statement: "It's the same color as an apple." Two key considerations determine the coding of rephrase or clue in teacher feedback: (a) the teacher does not merely repeat the question as originally asked but embellishes it in some way to make it easier for the child to respond; (b) nevertheless, he is still seeking the same response as asked for in the original question. The latter condition separates the present category from the category of new questions which follows, in which the teacher asks a new question which requires a different answer from the one asked originally.

The material provided by the teacher in rephrasing the question or giving a clue may or may not be helpful for the child -- certain types of clues may actually confuse him rather than help him. This fact should not be allowed to influence the coding. So long as the teacher does something which is intended by the teacher to help the child answer the original question, the teacher's action is coded as rephrase or clue.

New Question

The teacher asks a new question when she requires an answer that is different from the original question, although it may be closely related. A question requiring a new answer is coded as a new question. This is the only criterion. Thus to the original question "What color is this?", questions which elicit the same answer ("Is it red or blue?" "Is it red?") are coded as rephrase or clue. Questions which seek to elicit a different answer are coded as new questions ("Well, what color is this one?" "Have you been studying your homework?" "Is it bright or a dull color?").

The occurrence of sustaining feedback (repeats question, rephrase or clue, or new question) presents a special coding problem because this type of feedback gives the child a new response opportunity. This new response opportunity must then be coded for level of question, quality of answer, and additional feedback from the teacher. At the same time, the fact that it is a follow up to an original response opportunity rather than a wholly new response opportunity must be maintained in the coding system. This is accomplished by skipping down to the next row whenever sustaining feedback is coded, thereby bringing a close to the coding of the original response opportunity and beginning the coding for the follow up response opportunity. On the next row the level of question, the quality of the child's answer, and the nature of the teacher's further feedback is coded. Follow-up response opportunities occurring due to sustaining feedback in reaction to the original response opportunities are coded for type of response opportunity, which would be coded non-volunteer (NVOL) in all cases of sustaining feedback, level of question, quality of child's answer, and type of teacher feedback.

Other than the special conditions requiring skipping to a new row when sustaining feedback occurs, the coding of teacher's feedback reaction simply involves noting the appearance of new codable feedback categories

Note also that two or more occurrences of the same type of sustaining feedback (repeats question, rephrase or clue, or new question) may occur in succession and be coded separately. Thus a teacher might repeat the original question (or make some attempt to get the child to answer it) two or three times rather than just once. In such a situation, each repetition of the original question is coded, so long as there is some time in between which amounts to a new response opportunity being extended to the child. However, redundant repetition of the question ("Well -- do you know?") is coded as only a single repetition since no time for an opportunity to respond is allowed between parts of the question. When such time is allowed ("Well? . . . Do you know?"), two separate repetitions of the question are coded.

APPENDIX:

Examples of Teacher's Feedback Reactions

To facilitate comparison of examples of teacher feedback reactions to the answers of the children, examples will be given with reference to three typical teacher questions and child answers. The three situations are as follows:

Question one: What color is this? (the correct answer is "Red")

Question two: What word is this? (the word is "Bad") This question might be asked as stated or might be implied during the reading group, as when a child is reading but gets stuck when encountering the word "bad".

Question three: How do you think John feels? (the answer is "Bad" or any one of its synonyms)

Examples of teacher feedback reactions which might be made to the child's answers (or failures to answer) to the previous questions are presented below. Under each heading the feedback reactions following the number 1 refer to reactions to question one; those following the number 2 refer to reactions to question two; and those following the number 3 refer to the reactions to question three. Additional material and discussion of special situations will appear after the examples for each of the twelve categories of teacher's feedback reactions.

Praise

1. "Red!" (delivered with gusto and warmth)
   "Right -- it's red. Good, Johnny."
   "Good." (said in response to a child who has given the correct answer)
   "Yes, you really know your colors, don't you!"

2. "Good -- you remembered didn't you!"
   "Bad! Very good, Johnny."
   "Right -- you figured that out all by yourself, didn't you!"

3. "Yes, I think you're right, Johnny, that's good thinking."
   "Right, Mary! You read the story and found out how Johnny felt, didn't you?"

Criticism

Teacher feedback reactions coded as criticism include negation accompanied by gestural or expressive communication of anger, rejection, or frustration as well as direct verbal criticism:

"Maybe you'd know if you'd pay attention."
"You wouldn't make mistakes like that if you tried harder."
"Don't guess -- look at the word. You should know better than that."
"I told you to raise your hand before answering -- weren't you listening?"
"We've been over this three times already, John -- you should know it by now."
"That's not right -- what's the matter with you?"

No Feedback Reaction

The teacher is coded for no feedback reaction if he simply does not respond to the child following his answer of if he makes a verbal response which does not communicate information about the correctness or incorrectness of the child's answer. Examples of the latter: "You think it's red;" "I never thought of that."

Process Feedback

1. Process feedback is not possible in reaction to the child's answer to the first question, since the question deals with the arbitrary linguistic label which the English language attaches to the color "red." These and equivalent questions involve basic facts which must be simply memorized rather than explained. Since the correctness of the correct answer resides in arbitrary societal consensual agreement rather than in the presence of a logically based sequence or process, no process feedback is possible. In addition to color labels, other categories of questions which do not admit of process feedback include spelling, traffic signs and turn signals, and the interrelationships among units in systems of measurement. Thus process feedback could be given to a child when the question involves telling time from the clock, but not when the question concerns the number of minutes per hour or the number of hours per day.

2. Johnny, in order to read the word you have to sound it out (followed by a demonstration of how to sound out the word). When you don't know the word you can sometimes figure it out by thinking about the story so far and by looking at the picture (followed by an extended explanation of how the child might have figured out the word was "bad" by figuring out that Johnny felt bad in the story and that the particular sentence was describing how Johnny felt).

3. To figure out how Johnny feels you have to think about the story and about what happens to him (followed by a discussion of significant events in the story which would suggest that Johnny feels "bad").

Gives Answer

1. It's red. We call this color red. It's red, just like a stop light.
2. Bad. The word is bad. B-A-D spells bad. Not bed -- bad.
3. I think John probably feels bad. He doesn't feel very good, does he? He is very unhappy. (assuming the teacher equates this with "bad") He feels awful.

Asks Other

Here the teacher does not provide the answer for the child but instead asks for someone else to provide it:

Does anyone know?
Mary, can you tell me?
Can someone help John?
What is it, class? (the teacher may call for a chorus response rather than ask for a single child to respond)

Call Out

Call out is sometimes coded for the teacher's feedback reaction (although it is not a teacher response) if some other child calls out the correct answer when the first child gives an incorrect answer or is unable to respond. This includes both instances in which the child who calls out the answer is coded for response opportunity (because the teacher then turns his attention to him and makes a feedback response) and instances in which the child who calls out the answer does not get coded for a response opportunity (the teacher does not turn his attention to him and give specific individual feedback). Thus call out has a slightly different meaning for purposes of coding teacher feedback reaction than it does for coding response opportunities for individual children. Call out is coded in teacher's feedback reaction whenever the child gets feedback from another child who in fact calls out the answer; it is not necessary that the teacher give feedback to the child who called out the answer.

Repeats Question

1. What color? Well? Do you know?
2. Do you know that word? Are you stuck? What is it?
3. How does he feel? What do you think? Hmmmm?

Rephrase or Clue

1. Is it red or blue? Is it red? Is it blue? It's the same color as a stop light. It's our new color for today. It begins with "r". It rhymes with "bed".

2. Is it bad? Is it had or bad? Does he feel good or bad? Look at the first letter. What word does it rhyme with? We just had this word up here (pointing). How does Johnny feel? He feels _____?

3. Does he feel good or bad? Does he feel bad? Well, is he happy, sad, angry, or what? Look at his face. He's never going to see Sam again. How would you feel if you were Johnny? How does he look?

New Question

1. Yes, and what color is this? What else is red? Are you wearing anything that's this color?

2. Why did he feel bad? Is he crying? Did you study this story? How do you spell that word?

3. And how does Sam feel? Yes, how could you tell that he was sad? Then what happens? Why does he feel sad?

In general, the teacher's feedback to the child is coded as process feedback if he explains why an answer is wrong or if he explains what to do in order to get the right answer. If the original question was a process question, the teacher will be giving process feedback simply by giving the answer to that question. This includes the extreme case in which the child has answered the question correctly and the teacher responds merely by repeating the child's process answer. Except for the special case of process questions, however, the teacher must go beyond simply giving the answer to the original question in order to get credit for process feedback. For example, the teacher may be observing a child writing his name on the board. If she merely says "No, Johnny, you put a little 'j', your name begins with a capital 'J'." she would be coded for product feedback. However, if the teacher explained about names being proper nouns and proper nouns always being identified with an initial capital letter, she would be coded for process feedback.

The teacher may sometimes be credited with process feedback when this feedback is apparently not understood and therefore not successful.

The key consideration, however, is an attempt to communicate to the child why his response was wrong and to help him understand the processes involved, and not necessarily the child's success in reaching this understanding. Consider the following example:

Teacher: What color of clothes should you wear when riding a bike at night?

Child: Red, or maybe white.

Teacher: Don't you think you might want to wear white so that you could be seen better?

The teacher in this feedback reaction attempts to communicate the rationale underlying the choice of white as the appropriate color. This may or may not be understood by the child. The teacher is nevertheless credited with process feedback because of his attempt to delineate the rationale.

Differentiation among repeating the question, rephrasing the question, and asking a new question requires consideration of both the teacher's apparent intent and the response demand of the second question. For instance, when a child is reading and stops because he apparently does not know the next word, the teacher reaction "Are you stuck?" can be seen as functionally equivalent to "Do you know the word?" and therefore codable as repeat. However, the reaction "Did you study this?" is different. Here the teacher is not merely inquiring about whether the child knows the word or wishes to make a guess. He has shifted focus to the more general matter of the child's reading ability and faithfulness in practicing it. Consequently, this reaction is coded as a new question, since it demands a new response and is not an attempt to get the child to produce the word. The teacher reaction "How does Johnny feel?" would be coded as repeat with with reference to question three of the examples. However, its appearance in connection with question two, when the child was stuck when trying to read the word "bad", would be coded as providing a clue (attempting to help the child guess the word by using context clues).

STUDENT INITIATED QUESTIONS

This category is used to cover a public response opportunity that is initiated by the student rather than the teacher. Included are situations in which the student raises his hand and asks the teacher a question regarding the matter under discussion or some other matter. These are similar to other response opportunities in that they are dyadic teacher-child interactions which are public and monitored by the rest of the class. However they are not introduced by the teacher and do not involve the child answering a question posed by the teacher. These codings are tabulated separately later in order to keep them separated from the normal type of response opportunity in which the student answers the teacher posed question.

The student may raise his hand requesting permission to talk, or he may call out his question without permission. If the child calls out, check the CALL column. If he is given permission to speak, then leave this column blank.

Relevant (REL) is coded if the question has to do with the topic under discussion at the time, or if the question has to do with procedures for accomplishing the assignment or activity which is going on at the moment. For example, if the class is preparing to do a math assignment, a question about the number of problems to do; the procedure for working a particular problem; or the time that the assignment is due, would be relevant.

Irrelevant questions would be any which were not about the current topic. If the class was doing a math assignment and a child asked what time school dismissed for the day, the question would be coded as irrelevant (IREL).

Praise(+) and criticism (−) columns are reserved for coding the teacher's

positive or negative evaluation of the student's question. An example of Praise would be "That's a good question, I'm glad you asked that." Criticism would be coded if the teacher responded "That's a stupid question. You didn't think that through."

Simple "yes" and "no" answers would not be coded in these columns. They should be used only for noting the teacher's evaluation of the content of the child's question, not his behavior in asking it. For example, she might praise his question, in which case the praise (+) column would be checked, but she might warn him not to call out. This warning should be coded in the behavioral warning column.

The next set of columns provide for recording the type of teacher feedback. No feedback (0) is coded if she ignores the question and gives no response to the child. The teacher may delay her answer to the child because she is doing something else or because she will be answering it in a few moments when she is giving directions for doing homework, etc. She may ask him to hold his question for later or she may say, "I'll answer you when I'm through talking to Joe."

When she does respond to the question she may not accept (NACPT) it into the discussion, or otherwise refuse to entertain it. The teacher might say, "We aren't talking about that now" or "Let's stick to the subject."

Her response may be brief using a few words or a short phrase.

S: What page are we on?

T: Page 6.

A long feedback response from the teacher would involve a more detailed answer such as:

S: What page are we on?

T: Remember, we did the division problems on page 5 yesterday, so today we are going on to page 6 for practice.

In the case of a redirect, the teacher does not answer the question herself, but directs it to another student or to the whole class. She might say, "Can anyone answer Johnny?" or "Tell him, class."

The behavioral categories are used primarily for coding those instances when the teacher focuses on the child's actions in questioning. These are chiefly disciplinary situations where the child has violated some rule. Examples: The teacher may entertain the question, but reject the behavior. She could also praise the behavior.

Praise: "I like the way Sam got permission before he talked."

Criticism: "I just told you the answer to that. If you had been paying attention you would know!"

Warning: "Next time raise your hand and get permission to talk."

STUDENT INITIATED COMMENTS

Student initiated comments are treated in somewhat the same way as student initiated questions. However, since these contributions are comments and not questions which require specific answers from the teacher, teacher's answers will be coded differently. Comments may be coded as to whether or not they are called out without permission and whether they are relevant or irrelevant to the topic under discussion at the time as in the case of student initiated questions.

The teacher may praise ($\overset{+}{+}$) the content of the student's contribution by saying, "That's a good point. We should talk about that." She may criticize (=) by saying "That's not a good idea." and thereby negatively evaluate the student's comment.

The teacher may give no feedback (0) at all to the child's comment. This situation could occur if the child calls out a comment and the teacher does not

respond to it. She may delay her answer to the comment by saying, "We'll get to that later." The teacher may also not accept (NACPT) by listening to his contribution but telling him to stick to the subject or rejecting his suggestion by saying, "We don't need that now."

The teacher may also accept (ACPT) his comment with a nod, an "OK" or a "yes" or in some other unevaluative way and then turn her attention to someone else. In that case the (ACPT) column is coded.

The integrate column is checked (INTEG) is the teacher takes the child's comment and incorporates it into the class discussion. This could happen if for example, the class is listing something like "Rules for Good Health". If the child names a good rule and the teacher puts it on the board, the coder would code an (INTEG).

Shift is coded if the child's comment or contribution changes the direction of the class discudsion. The teacher may take up the contribution and move the discussion along lines dictated by the child's point.

The behavioral categories are coded for comments in the same way as they are coded for student initiated questions. The teacher may accept and even praise the comment, but warn or criticise the child about calling out without permission, or about staying in his seat.

The coder must be careful not to code as student initiated comments a child's answer to a question the teacher asked previously. For example:

Teacher: What is this shape? George?

George: It's a triangle.

Sam: That's not a triangle. A triangle has three sides.

Judy: It's a square.

Teacher: Right, a square.

Sam's statement is a student initiated comment since it is not an answer to a question asked by the teacher, but is merely a comment. Judy's statement is an answer to the teacher's question, however, and is therefore coded as a response opportunity rather than a student initiated comment.

SELF REFERENCE QUESTIONS

The self reference question requires the child to make some non-academic contribution to the classroom discussion. Any questions which do not involve academic content and/or are not intended to elicit a particular correct factual answer are tallied as self-reference questions. Such questions do not have objectively verifiable right or wrong answers. Instead they ask the child for his personal experiences, preferences, home life or other factors in his personal background.

Examples:

Do you have a(dog, car,cold, pencil,)?
When is your birthday?
Do you like (arithmetic, ice cream, this story,)?
What are you doing?
Have you ever seen (a football game, the inside of a space capsule)?
Do you understand the work?
Did you do your homework?

The coder must determine whether or not the question is subject-matter related, that is, whether the question is somehow related to the subject at hand. For example, the teacher might begin the introduction of a new unit on agriculture with the self question, "Have you ever planted a garden?" A second coding decision must be made once subject-matter-related vs. non subject-matter-related is determined. and that is whether the question is a request for the child to show a preference or to give information about his past experience. Once these distinctions are made a hash mark is placed in the appropriate box. If the coder cannot decide between subject-matter related and non-subject-matter related, then one tally will go in the column marked (?).

OPINION QUESTIONS

Opinion questions occur frequently when the teacher starts a discussion on some topic. The teacher's purpose is usually to get a discussion going, and her responses to the children are conditioned more by this general aim than by a concern for the correctness or incorrectness of a given opinion. Opinion questions require the student to take a position on an issue or to predict the outcome of an experiment or hypothetical situation. It assumes that the child's opinion stems from an articulated rationale rather than from some chance whim. If pressed he could give reasons as to why he formed it. This type of question is usually when the teacher is trying to introduce a new unit of study.

In contrast, the preference type of self-reference question previously discussed merely asks the child to express a preference or choose among alternatives on the basis of taste. The question is not as centrally related to curriculum goals as the opinion question, and the child does not have to go through an articulated thinking process in order to answer it.

A few examples of opinion questions would include the following:

What would you do in that situation?

Do you think there should be a law limiting the number of children people have?

Do you think that people will be living on the moon in the year 2000?

The (NR) No Response column is checked only if the child makes no response when asked an opinion question. A response can be verbal or non-verbal. The coder may hear or see a child respond, but if the response is not perceived by the teacher, it is coded as a No Response (NR).

The Praise (+) column should be coded if the teacher offers some positive evaluation of the content of the child's answer to the opinion question. She might Praise by saying, "That's good. I hadn't thought of that." It is also possible for the teacher to Criticize (-) the child's response or offer

ome negative evaluation of the child's response which goes beyond mere disagreement.

Teacher's feedback, aside from Praise or Criticism, may also be coded in the following ways as well. She may Ignore (O) the child entirely by turning her attention away, responding to another child, or otherwise give no feedback of any kind.

The Disagree column is coded if the teacher has heard the child, but indicates that she does not accept what he has said. She may Disagree by saying, "Oh, I wouldn't do that." "I wouldn't like that." or by offering a counter opinion.

The teacher may also Accept (ACPT) what the child says in some non-commital way by saying "I see.", "OK", or by nodding and indicating that she has heard and registered the child's answer.

Integrates should be checked if the teacher takes the child's opinion and weaves it into the ongoing discussion or uses it in any way to build on.

Example:

> "Bill says that we don't know enough to have people living on the moon. This may be true, but what about in the year 2000?"

DYADIC TEACHER-CHILD CONTACTS

Dyadic teacher-child contacts differ from response opportunities and reading and recitation turns in that the teacher is dealing privately with one child about matters idiosyncratic to him rather than publicly about material meant for the group or class as a whole. The latter distinction is the key one, since teacher-child dyadic contacts are not always private (the teacher may talk in a loud voice or address the child from across the room). Such interactions are nevertheless coded as teacher-child dyadic contacts as long as they involve matters idiosyncratic to the child and are not public questions (response opportunities) or reading or recitation turns.

Dyadic teacher-child contacts are divided into personal, procedural contacts, work related contacts, and behavioral or disciplinary contacts. They are also separately coded according to whether they are initiated by the teacher (teacher-afforded) or by the child (child-created). The coding also reflects certain aspects of the teacher's behavior in such contacts.

All contacts between the teacher and an individual child that do not involve reading, recitation or a public response opportunity are coded into one of the categories of dyadic contacts (procedural, personal, work-related or behavioral). They are separately coded according to whether the teacher or the child initiated the interaction.

Interactions are coded as <u>teacher</u>-<u>afforded</u> if the teacher gives feedback about work when the child has not solicited it (the teacher either calls the child to come up to his desk or goes around the room making individual comments to the students). <u>Created</u> contacts are not planned by the teacher and occur solely because the child has sought him out; <u>afforded</u> contacts are not planned by the child and occur solely because the teacher initiates them. Separate space is provided for coding <u>created</u> and <u>afforded</u> work related interactions on the coding sheets, and the coder indicates the nature of an individual dyadic contact by where he codes the interaction.

CHILD CREATED CONTACTS

In dealing with child created contacts, the first necessary decision to be made is whether the contact is work-related (having to do with either content or procedure) or personal (relating to procedure or experience sharing).

Child-created contacts (work-related)

There are two types of work-related child-created contacts: content related and procedure related.

Examples:

1. content related
   shows work after finishing
   asks for help with problem
   wants to know how to spell a work
   wants to know if answer is right

2. procedure related
   Asking what page to do, or what problems
   asking permission to read library book
   asking for repetition of assignment
   asking how to title paper

When a child-created work-related contact occurs, the first decision to make is whether it is content-related or procedural. Then there are five columns divided into two sections in which to record the teacher's feedback to the child.

1. Evaluative comments (praise and criticism)

Praise (++) should be coded whenever the teacher make a positive evaluative comment to the child regarding the quality of his work or the effort he is expending.

Examples:

"Your're doing very well. Keep it up."
"I'm very pleased to see you working so hard."
"You got all your math problems correct. That's excellent."

Praise comments are usually said with feeling and often with some

affect such as a smile, a pat on the shoulder, etc.

Criticism (-) should be coded when ever the teacher makes a negative evaluative comment to the child regarding the quality of his work and the effort he is expending. This negative evaluation goes beyond mere disagreement. She may disparage his ability or motivaiton.

Examples:

"You're not trying."
"I told you to do the exercise on page 11. That's page 21."
"Your papers are always messy. You just don't care."

Note that nonevaluative comments, those which have in the past been coded as "feedback" (FB) are not coded at all. The number of times that the teacher gives feedback can be determined by adding the check marks in the section next to the praise and critisism section. This second section will always be coded whenever there is a child-created contact. The praise and criticism columns are coded only when they occur.

2. Extent of teacher feedback to child-created work contacts:

The manner in which the teacher gives feedback,aside from evaluative comments, may be distinguished in any one of the following ways.

Delay: This column should be coded whenever a student attempts to initiate contact with the teacher which is obviously related to work (e.g. he approaches the teacher's desk with his workbook, reader, or a sheet of paper) and the teacher is occupied or hasn't time at the moment to attend to the child and hence, puts the child off. The teacher may tell him to return to his seat that he (the teacher)will get to him later, or to wait his turn in line, etc.

Example:

A student stands by the teacher's desk with a book in hand. The teacher is preparing a note to go to the office. The teacher may look up and say, "I'll get to you in a minute. Please sit down." Or the teacher might simply wave the child away and point to his chair.

Brief should be coded when the interaction between the teacher and child is of very short duration. For example, the teacher may glance at the workbook the child is holding and say "Good!" or "That's fine!". She may respond to a child's question by saying, "Page 5." or "In your Think and Do book." In any case the coder should check brief if the teacher's feedback consists of a short sentence (3 or 4 words) or less.

Examples:

"Good!" would be coded as (++) Brief
"That's terrible!" would be coded as (=) Brief
"OK." would be coded as Brief only.

Long is coded when the interaction exceeds that of a short sentence or phrase, as in the case of Brief. All extended feedback from the teacher should be coded in this column.

Examples:

"That's good. I'm pleased with your work today." would be coded as (++) Long.
"You should have been listening earlier. I told you exactly how to work that problem." would be coded as (=) Long.
"I think you'll find it easier if you use the vocabulary in the back of the book." is coded Long only.

The "don't know" (?) category is added for this coding because frequently the individual teacher-child interaction that occurs in the dyadic contacts will be carried on in hushed tones or across the room from the coder where he cannot hear the content of the interaction. In such cases, where he is unable to code the nature of the teacher's feedback because he cannot hear it, the coder notes the occurrence of the interaction and the fact that it was either teacher-afforded or child-created.

Coders should note that the "don't know" column has a very special and specific meaning for this coding. It should be used only when the coder cannot hear the teacher's feedback. It must not be used when the coder is unsure about whether to code the teacher's feedback as process or product. Thus, use of this column signifies that the coder could not hear the interaction, not that he has difficulty in making a coding decision on the basis of something that he was able to hear.

Child-created contacts - Personal

There are two types of peraonal child-created contacts: experience sharing and procedure related.

1. Experience sharing

Examples:
Child tells teacher of experience that happened to him over the weekend.
Child tells about event within his family.
Child tells teacher about not feeling well.

All experience sharing contacts are personal ones in which the student approaches the teacher to tell him something that is not related to either classroom work or procedure.

The teacher's feedback might fall into two categories: acknowledge (ACK) or delay (DELAY). The teacher's feedback would be coded as acknowledge if the teacher listens to the student's experience and perhaps comments on it or simply nods her head and acknowledges that she has heard. The teacher's feedback would be coded as DELAY if she indicates to the student that she is unable to listen to his experience or talk to him about it at the time.

2. Procedure-related

Examples:

Procedural interactions created by the child

Wants paper, pencil, eraser, etc.
Seeks permission for washroom, drink, etc.
Finishes work and wants to know what to do
Has wrong book or worksheet and wants to exchange
Tattles on other children
Offers to do a job or errand
Reminds teacher of something or calls attention to something

In this situation, where a request for permission is involved, the teacher's feedback may be one of the following: GRANT, (permission is given), DELAY (teacher signals the child that she cannot deal with him now but will do so later), or NOT GRANT (permission is not given or the request is denied).

TEACHER AFFORDED CONTACTS

Teacher-afforded Contacts (work-related):

The category designations are the same for teacher- afforded work-related contacts as they are for the child-created contacts. The same distinctions apply to the praise (++), criticism (–) and don't know (?) categories for the teacher-afforded situation as for the child-created situation. Also, in terms of extent of teacher feedback to a given child, the brief and long designations apply here. The one difference is that under teacher afforded contacts there is added an Observes column and the Delay column is omitted.

Observes is coded whenever the teacher is moving around the room glancing at student work, but not entering into verbal interaction. Thus it should not be confused with don't know (?) simply because no verbal interaction takes place.

Example:

The teacher is walking around the room and stops at Susan's chair and looks over Susan's shoulder at her workbook. The teacher remains here looking for 10 seconds or so and then moves to another part of the room.

The coder should check the observe column only when the teacher stops and looks at a child's work. It should not be coded if the teacher is merely moving around the room scanning as she moves. Also, if the teacher stops and observes but then says something to the child, brief or long should be coded and not observe.

Teacher Afforded Contacts - Personal

As in the case of child created personal contacts, these contacts do not involve either work content or procedure. They are of a strictly personal nature and might involve such things as a teacher asking a student about an experience he had on the weekend, about the health of some member of the student's family, or perhaps about what happened at home the night before to make the child so moody or sleepy. In the case of a contact of this sort, a check would be placed in the column marked PERS.

Teacher-afforded contacts (procedure-related):

Within this category a distinction is made between those afforded procedures which are favors for the teacher,(or those which the child is called upon to do which help with the running of the classroom. The child in this case becomes a "helper".) and those situations which have to do with classroom management or organization. These requests have to do with getting the child ready to work on an assignment.

Examples:
Favor is coded if the teacher asks the child to pass out the crayolas, workbooks, readers; take a note to the office; lead the line to lunch or P.E.; take names when she leaves the room..

Management is coded if the teacher asks the child to cover his paper, sharpen his pencil, get out his math book, change his seat in the classroom.

Thank you is checked if, in addition to an afforded procedure, the teacher thanks the child for performing the favor. Thank you's will be heard more frequently in connection with the teacher's request for a favor from the child than in the management situation, however, it would not be impossible for them to occur following management requests.

Examples:
T: Laura, will you pass out the lunch cards, please. (code teacher-afforded procedure, favor)
S: (Passes out cards and sits down)
T: Thank you, Laura. (Check thank you column.)

T: John, get out a clean sheet of paper. (Teacher-afforded procedure, management)
S: (John gets out paper.)
T: (Teacher begins writing on board and turns attention away from John.) (No thank you is coded)

Behavioral Contacts

Behavioral contacts are coded whenever the teacher makes some comment upon the child's classroom behavior. They are subdivided

into praise, non-verbal intervention, warnings, and criticism.

Behavioral evaluation contacts are considered to be teacher afforded, although they usually occur as reactions to the child's immediately preceding behavior. Nevertheless, they are teacher-afforded in the sense that the child usually does not want and does not expect the interaction, and the teacher chooses to single the child out for comment. The conditions for coding this category are: (a) the teacher singles out the child for comment upon his classroom behavior; (b) the interaction concerns only his behavior and does not involve praise or criticism in connection with work-related or procedural contacts as defined above. Some behavioral criticism may occur in work-related and procedural contacts, and in those situations it appears in the coding for work-related and procedural interactions. The category of behavioral interactions is used only for those instances in which the teacher singles out the child for comment solely on the basis of wanting to discuss his classroom behavior. Work-related or procedural matters are not involved.

Most of the evaluations coded in this category will occur in connection with the child's attention, cooperation, and performance of classroom rituals, although occasionally they will be comments made in relation to the child's academic work. In the latter case, there will be evaluations made at the conclusion of a lesson or a school day in which the teacher refers to the child's general performance. Teacher praise or criticism of this sort would not be picked up by the coding system otherwise, since it does not occur as part of a response opportunity, reading or recitation turn, and other dyadic contact.

Praise

This category will be used relatively infrequently with most teachers, although it will occur. Occasionally children will be singled out for special praise when they have done a particularly good job of cleaning up their desks, sitting up straight, keeping

quiet in preparation for leaving the room, etc. Praise coded in this category will also sometimes occur after activities but not in relation to specific responses during those activities ("Johnny really knew all his words today -- he must have studied real hard last night."). Idiosyncratic teacher euphemisms that carry the same sorts of meanings as the preceding examples are also considered to be praise ("Johnny has on his listening ears today," "Mary knows how to get ready to go."). Whenever the teacher singles out a child for such praise, coders should check the praise (++) column under behavioral teacher-afforded contacts.

Examples:

1. Praise

"John is all ready." (has his hands folded, is sitting up, etc.)
"John's got his listening ears on today."
"John, you really knew your words today, didn't you?" (said after the lesson rather than during a response opportunity)

Non-Verbal Intervention is included in this system to account for those situations in which the teacher takes steps to correct a behavioral problem, however, she does so without disrupting the whole class. She may move close to a child who is talking, she may tap a child on the shoulder who is daydreaming and point to his book; or she could turn a child around in his seat when he is facing the wrong way and looking at his neighbor. These are cases where the teacher does intervene, but does so inaudibly with a minimum of disruption.

Warning

This category and the following one refer to teacher behavior in singling out for comment a child engaging in inappropriate or undesirable classroom behavior. Comments and audible gestures, such as tapping a ruler on the desk or finger snapping, which function as warnings and which do not include elements codable as criticism are coded in the warning category, while negative reactions which do contain criticism are coded in the criticism category to be described below. Usually teachers' warnings will occur in situations in which the child is doing something that is not necessarily or always prohibited but which is troublesome at the moment. In such instances the teacher will single out the child to inform him that his present behavior is inappropriate, but will do so

without communication of rejection or anger as in criticism. Examples of this are as follows: "Johnny, you're getting too noisy" "Try to figure out the answer on your own -- don't copy off your neighbor" "Johnny, you can talk to Mary if you want to, but stay in your seat."

The lines of demarcation between procedural-afforded interactions and behavioral warnings, and between behavioral warnings and behavioral criticisms, are sometimes difficult to discern.

Sometimes the same or nearly the same words could be coded in either category, with the decision being made on the basis of the nonverbal expressive and gestural components of the teacher's message. Behavioral instructions given to the child merely in the interest of information or classroom management and without any connotation of warning or criticism would be coded as afforded procedural contacts. The same instructions given in a slightly different context which connoted more of a warning and perhaps implied that the child should know better ("John sit down -- Mary can't see when you stand up like that.") would be coded as behavioral warnings. If the same sentence were snapped at the child or delivered with anger or exasperation, it would be coded as behavioral criticism.

Warning

"You're too loud, John."
"Stay in your seat, John."
"Raise your hand if you want to answer."
"Try to figure out the answers yourself."
Teacher snaps her fingers at a child who is not paying attention.

3. Criticism

"Keep your voice down, John!" (with irritation)
"John -- sit down!!"
"I told you to raise your hand first -- don't you listen?"
"Keep your eyes to yourself, John, his paper is none of your business."

BEHAVIOR-RELATED CONTACT ERRORS

When coding a desist event (the stopping by the teacher of misbehavior), we would like to obtain a measure of her effectiveness of method. We can do this by recording certain errors which she may make when halting a deviancy, target, timing, overreaction, and shift errors.

A TARGET ERROR is coded when the desists the wrong student or desists an onlooker or contagee rather than an initiator. For example, all is quiet until Mary whispers to Jane. Jane then says something back to Mary, and Jami turns around to listen. "Jami, turn around and get back to work," the teacher says. A target error is also coded if one deviancy is stopped while another, more serious misbehavior was allowed to continue. Thus, if Bob were tossing paper airplanes while the teacher was chastizing Mary and Jane, that would be a target error.

A TIMING ERROR is coded whenever misbehavior increases in seriousness or spreads to more children before being halted. For instance, Jack whispers to Craig, who whispers to Jim, and then Barney whispers to Craig, and then the teacher desists. Also, if John says something to Clem, Clem pokes John, John pokes Clem, and they start to pull each other's shirts off before the teacher stops them, the desist is considered "too late" because the misbehavior increased in seriousness before she acted.

Occasionally the coder will be busy coding other information prior to a desist and will not have been able to gather sufficient evidence to judge whether or not a target or timing error has been made. In these cases, place a check in the "?" column. This refers only to the target and timing error columns, since the coder can usually tell if an overreaction or shift error has been made without having previously observed the children.

An overreaction error occurs whenever a teacher overreacts to a deviancy. For example, if Mary and Jane stop talking and get back to work before the teacher desists, OVRCT should be coded; since the misbehavior had already stopped, the teacher should have ignored it. It would not be a timing error because the misbehavior does not spread or become more serious. Another instance: The class is in a discussion and Hercules is talking when the teacher says, "Hercules, stop talking. This is not a playground, it's a classroom, and we're supposed to be working. If you talk, you disturb your neighbors so they can't work. So let's all get back to work and be quiet." This overdwelling on the point is an overreaction error because the teacher's action is more than sufficient to stop the talking. Of course, if a serious deviancy such as a fight occurs, stern action would be appropriate since the class has already been disturbed. Even so, the teacher can commit an overreaction error by criticizing the deviants beyond the point where they understand and conform.

The "NOERR" column is checked whenever the teacher desists without committing any of the four errors. As mentioned before, the "?" should be used and the "NOERR" column not checked if the coder is not sure that a target or timing error has not occurred.

School_____ Date___/___/___ Start_____ PAGE_____

Teacher_____ Observer_____ Stop_____ OF_____

RESPONSE OPPORTUNITIES

TIME	CHILD			QUEST			ANSWER				ACADEMIC						TERMINAL FEEDBACK				SUSTAINING		
	PREOL	NVOLL	CALL	PCSS	PCRSD	CHOIS	+	±	-	DK	NR	+ +	- -	0	PCSS	GIVANS	ASKOTH	CALL	REPT	REPH or CLUE	NEWQ

School_____ Date___/___/___ Start_____ PAGE_____

Teacher_____ Observer_____ Stop_____ OF_____

SUBJECT_____ TYPE OF ACTIVITY_____ TIME BEGUN_____